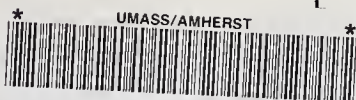


MASS. EA 27.3: 978



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MASSACHUSETTS  
AIR QUALITY  
DATA SUMMARIES  
FOR  
**1978**

EA 27.3

GOVERNMENT DOCUMENTS  
COLLECTION

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DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
DIVISION OF AIR AND HAZARDOUS MATERIALS

813/172



TABLE 1

1978 CONTINUOUS SO<sub>2</sub> SUMMARYDEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
MASSACHUSETTS AIR SURVEILLANCE NETWORKSULFUR DIOXIDE (SO<sub>2</sub>) method: INSTRUMENTAL COULOMETRIC units: PARTS PER BILLION (ppb)

CITY	SAROAD I.D.	DIST. I.D.	NUMBER OF HOURLY OBS.	ANNUAL ARITH. MEAN	MAXIMUM 24 hr OBSERVATION	2nd MAX 24 hr OBSERVATION	MAXIMUM 3 hr OBSERVATION	2nd MAX 3 hr OBSERVATION
SITE LOCATION								
<u>BERKSHIRE AIR QUALITY CONTROL REGION (117)</u>								
PITTSFIELD	1800-004	BK-03	5422	9*	51	46	110	100
DALTON AVE., STATE POLICE								
PITTSFIELD	1800-005	BK-05	440	13 *	37	27	66	59
EAST ST., INCINERATOR								
<u>CENTRAL MASSACHUSETTS AIR QUALITY CONTROL REGION (118)</u>								
FITCHBURG	0620-003	CM-13	7838	11	52	42	75	72
G & E SUBSTA., SUMMER ST.								
WORCESTER	2640-012	CM-11	7079	14*	60	54	100	93
WASHINGTON & NEW SALEM STS.								
<u>MERRIMACK VALLEY AIR QUALITY CONTROL REGION (121)</u>								
GEORGETOWN	0730-001	MV-15	8136	7	41	36	116	116
HIGH SCHOOL								
LAWRENCE	1000-003	MV-10	7406	15	69	66	107	102
LAWRENCE GENERAL HOSPITAL								
LOWELL	1080-004	MV-09	8051	10	44	41	68	67
JOHN STREET MUNIC. GARAGE								
<u>METROPOLITAN BOSTON AIR QUALITY REGION (119)</u>								
BOSTON	0240-002	MB-01	7789	19	63	59	179	162
KENMORE SQUARE								
EAST BOSTON	0240-016	MB-25	2561	14*	44	36	78	76
CALLAHAN TUNNEL								
CAMBRIDGE	0360-004	MB-05	5371	16*	56	56	99	95
SCIENCE PARK								
QUINCY	1880-002	MB-21	6355	12	52	48	88	86
FORE RIVER BRIDGE								
MEDFIELD	1210-001	MB-28	7715	8	39	31	53	51
STATE HOSPITAL								

(continued)

\* Arithmetic mean calculated with less than complete year.

TABLE 1 (cont.)

1978 CONTINUOUS SO<sub>2</sub> SUMMARYSULFUR DIOXIDE (SO<sub>2</sub>)

units: ppb

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF HOURLY OBS.	ANNUAL ARITH. MEAN	MAXIMUM 24 hr OBSERVATION	2nd MAX 24 hr OBSERVATION	MAXIMUM 3 hr OBSERVATION	2nd MAX 3 hr OBSERVATION
SITE LOCATION								
METROPOLITAN BOSTON AIR QUALITY REGION (119) (cont.)								
MEDFORD	1220-003	MB-19	7419	13	53	53	99	93
WELLINGTON CIRCLE								
WALTHAM	2340-004	MB-20	5816	10*	45	42	72	71
MAIN AND MOODY STS.								
PIONEER VALLEY AIR QUALITY CONTROL REGION (042)								
CHICOPEE	0400-005	PV-14	7594	11	65	62	144	129
CHICOPEE STREET								
SPRINGFIELD	2160-005	PV-06	8135	13	121	105	357	355
EAST COLUMBUS AVENUE								
SOUTHEASTERN MASSACHUSETTS AIR QUALITY CONTROL REGION (120)								
ATTLEBORO	0120-003	SE-10	8228	6	37	30	62	60
LaSALLETTE SHRINE, PARK ST.								
FALL RIVER	0580-004	SE-06	7960	12	60	45	303	288
GLOBE STREET TRAILER								

Table 2

1978 CO SUMMARYDEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
MASSACHUSETTS AIR SURVEILLANCE NETWORK

CARBON MONOXIDE (CO) method: Non-dispersive Infra-red units: Parts per Million

CITY	SAROAD	DIST	NUMBER	# OF	# OF	MAX	2nd	MAX	2nd
	I.D.	I.D.	OF	8hr	DAYS	1hr	MAX	8hr	MAX
SITE LOCATION			HOURLY	AVGS	w/8hr	OBS	1hr	OBS	8hr
			OBS.	ABOVE	AVGS		OBS		OBS
				9	ABOVE				
					9				

CENTRAL MASSACHUSETTS AIR QUALITY CONTROL (118)

WORCESTER	2640-012	CM-11	7533	2	2	17	16	10	9
WASHINGTON & NEW SALEM STS									

MERRIMACK VALLEY AIR QUALITY CONTROL REGION (121)

LOWELL	1080-004	MV-09	8076	7	7	16	16	11	11
JOHN STREET MUNIC. GARAGE									

METROPOLITAN BOSTON AIR QUALITY CONTROL REGION (119)

BOSTON	0240-002	MB-01	8366	13	12	20	19	12	12
KENMORE SQUARE									
EAST BOSTON	0240-016	MB-25	6566	24	18	23	23	15	15
CALLAHAN TUNNEL									
CAMBRIDGE	0360-004	MB-05	6274	3	3	16	13	10	10
SCIENCE PARK									
MEDFORD	1220-003	MB-19	8058	6	6	19	19	13	13
WELLINGTON CIRCLE									
QUINCY	1880-002	MB-21	7010	1	1	14	14	9	9
FORE RIVER BRIDGE									
WALTHAM	2340-004	MB-20	5884	2	2	16	16	9	9
MOODY AND MAIN STREETS									

PIONEER VALLEY AIR QUALITY CONTROL REGION (042)

SPRINGFIELD	2160-005	PV-06	8719	11	10	27	26	16	15
EAST COLUMBUS AVENUE									

TABLE 3

1978 O<sub>3</sub> SUMMARYDEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
MASSACHUSETTS AIR SURVEILLANCE NETWORK

OZONE (O <sub>3</sub> ) method: CHEMILUMINESCENCE													units: Parts per Billion (ppb)											
CITY	SAROAD I.D.	DIST I.D.	NUMBER OF HOURLY OBS.	# OF HRS ABOVE 80	# OF DAYS ABOVE 80	# OF DAYS ABOVE 120	MAXIMUM HOUR AND 2nd MAXIMUM HOUR BY MONTH																	
							APR	MAY	JUN	JUL	AUG	SEP	OCT											
SITE LOCATION																								
BERKSHIRE AIR QUALITY CONTROL REGION (117)																								
PITTSFIELD	1800-004	BK-04	4970	101	19	3	65 57	128 96	180 152	120 112	120 100	80 75	68 68											
DALTON AVE., STATE POLICE																								
CENTRAL MASSACHUSETTS AIR QUALITY CONTROL REGION (118)																								
WORCESTER	2640-012	CM-11	4862	49	14	3	65 60	113 109	87 84	170 140	82 81	133 113	67 66											
WASHINGTON & NEW SALEM STS																								
MERRIMACK VALLEY AIR QUALITY CONTROL REGION (121)																								
GEORGETOWN	0730-001	MV-15	4910	182	31	6	70 65	145 144	117 115	170 153	104 103	125 121	75 75											
HIGH SCHOOL																								
METROPOLITAN BOSTON AIR QUALITY CONTROL REGION (119)																								
MEDFIELD	1210-001	MB-28	4925	189	38	6	77 75	107 105	126 124	169 156	129 118	138 134	78 76											
STATE HOSPITAL																								
MEDFORD	1220-003	MB-19	4802	71	17	3	43 41	92 89	95 90	145 145	90 90	110 109	60 60											
WELLINGTON CIRCLE																								
QUINCY	1880-002	MB-21	4627	122	29	3	65 65	111 90	102 98	150 135	115 100	110 108	74 71											
FORE RIVER BRIDGE																								

(continued)



TABLE 3 (cont)

1978 O<sub>3</sub> SUMMARY

units: ppb

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF HOURLY OBS.	# OF HRS ABOVE 80	# OF DAYS ABOVE 80	# OF DAYS ABOVE 120	MAXIMUM HOUR AND 2nd MAXIMUM HOUR BY MONTH							
							APR	MAY	JUN	JUL	AUG	SEP	OCT	
PIONEER VALLEY AIR QUALITY CONTROL REGION (042)														
AMHERST UNIV. OF MASSACHUSETTS	0060-001	PV-10	3547	84	13	4	38 35	100 100	155 140	140 140	70 70	111 106	75 69	
SOUTHEASTERN MASSACHUSETTS AIR QUALITY CONTROL REGION (120)														
ATTLEBORO La SALLETTA SHRINE, PARK ST.	0120-003	SF-10	4955	82	21	2	67 66	115 107	90 83	154 139	107 104	98 94	83 78	
FALL RIVER GLOBE ST TRAILER	0580-004	SE-06	4223	83	17	2	70 70	170 116	89 89	ND ND	140 131	112 107	73 72	

ND - NO DATA AVAILABLE FOR THESE MONTHS

TABLE 4

1978 CONTINUOUS NO<sub>2</sub> SUMMARYDEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
MASSACHUSETTS AIR SURVEILLANCE NETWORK

NITROGEN

DIOXIDE (NO<sub>2</sub>) method: CHEMILUMINESCENCE units: Parts per Billion (ppb)

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF HOURLY OBS	ARITH. MEAN	MAX 24hr OBS	2nd MAX 24hr	MAX 1hr OBS	2nd MAX 1hr OBS
SITE LOCATION								
BOSTON	0240-002	MB-01	6482	46	145	129	265	225
KENMORE SQUARE								
EAST BOSTON	0240-016	MB-25	5902	46	148	130	252	243
CALLAHAN TUNNEL								
WORCESTER	2640-012	CM-11	6735	27	78	61	125	123
WASHINGTON & NEW SALEM STS								
SPRINGFIELD	2160-005	PV-06	8209	45	98	96	175	170
EAST COLUMBUS AVENUE								



1978 SO<sub>2</sub> BUBBLER SUMMARYDEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
MASSACHUSETTS AIR SURVEILLANCE NETWORKSULFUR DIOXIDE (SO<sub>2</sub>) method: WEST-GAEKE units: PARTS PER BILLION (ppb)

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF OBS.	ANNUAL ARITH. MEAN	GEOM STANDARD DEV.	MAXIMUM 24 hr OBS	2nd MAXIMUM 24 hr OBS
SITE LOCATION							

## BERKSHIRE AIR QUALITY CONTROL REGION (117)

NORTH ADAMS HOLDEN STREET	1580-002	BK-08	15	ID	2.73	13	12
PITTSFIELD HIBBARD SCHOOL	1800-002	BK-04	14	ID	3.46	31	30
PITTSFIELD DALTON AVE., STATE POLICE	1800-004	BK-03	15	ID	2.94	19	15

## CENTRAL MASSACHUSETTS AIR QUALITY CONTROL REGION (118)

ATHOL CITY HALL	0100-001	CM-08	12	ID	2.22	16	15
FITCHBURG G&E SUBSTA. SUMMER ST.	0620-003	CM-13	15	ID	3.03	24	19
FITCHBURG WATER ST. FIRE STATION	0620-004	CM-14	13	ID	3.32	23	20
FITCHBURG GAS & ELECTRIC BUILDING	0620-006	CM-16	15	ID	2.05	7	6
WARREN HIGH SCHOOL	2372-001	CM-10	14	ID	2.28	7	6
WORCESTER NARCUS DEPARTMENT STORE	2640-004	CM-02	13	ID	1.97	28	27
WORCESTER CLARK UNIVERSITY	2640-008	CM-01	14	ID	2.68	18	18
WORCESTER PARKER BUILDING	2640-009	CM-07	14	ID	2.40	22	19
WORCESTER WASHINGTON AND NEW SALEM	2640-012	CM-11	14	ID	2.43	35	30
WORCESTER HEALTH DEPARTMENT	2640-013	CM-15	13	ID	2.02	19	12

(continued)

ID - Insufficient data in two or more quarters prevents accurate calculation of arithmetic mean.

BDL -Below detectable limits of analysis technique (i.e. 5 ppb).

1978 SO<sub>2</sub> BUBBLER SUMMARY

units: ppb

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF OBS.	ANNUAL ARITH. MEAN	GEOM STANDARD DEV.	MAXIMUM 24 hr OBS	2nd MAXIMUM 24 hr OBS
SITE LOCATION							
METROPOLITAN BOSTON AIR QUALITY CONTROL REGION (119)							
BOSTON KENMORE SQUARE	0240-002	MB-01	14	ID	2.31	29	22
BOSTON SOUTH BAY	0240-012	MB-04	12	ID	2.90	28	27
BOSTON CALLAHAN TUNNEL	0240-016	MB-25	13	ID	2.99	35	24
BROCKTON PAINE SCHOOL, CRESCENT ST	0320-003	MB-SE	11	ID	1.72	6	BDL
BROOKLINE HIGH SCHOOL	0340-001	MB-17	14	ID	2.21	21	18
CAMBRIDGE HARVARD HERBARIUM	0360-001	MB-11	11	ID	3.08	14	12
CAMBRIDGE SCIENCE PARK	0360-004	MB-05	14	ID	2.83	18	17
FRAMINGHAM MIDDLESEX COUNTY COURT	0660-001	MB-14	9	ID	2.72	12	9
LYNN CITY HALL	1100-001	MB-06	12	ID	3.73	33	28
MEDFIELD STATE HOSPITAL	1210-001	MB-28	13	ID	1.90	15	10
MEDFORD FIRE HEADQUARTERS	1220-002	MB-08	12	ID	2.33	29	18
MEDFORD WELLINGTON CIRCLE	1220-003	MB-19	13	ID	2.93	32	26
NEEDHAM GLOVER MEMORIAL HOSPITAL	1480-003	MB-33	13	ID	1.91	7	5
NORWOOD NAHATAN STREET FIRE STA	1700-001	MB-18	13	ID	1.79	6	BDL
QUINCY FORE RIVER BRIDGE	1880-002	MB-21	12	ID	2.54	30	23
QUINCY ATLANTIC FIRE STATION	1880-007	MB-31	10	ID	2.98	33	31
REVERE GARFIELD JUNIOR HIGH	1940-002	MB-10	12	ID	2.66	36	35
WALTHAM MAIN & MOODY STREETS	2340-004	MB-20	12	ID	1.55	27	22
WOBURN MIDDLESEX COUNTY COURT	2620-002	MB-09	10	ID	1.79	BDL	BDL

(continued)

ID-Insufficient data in two or more quarters prevents accurate calculation of arithmetic mean.

BDL-Below detectable limits of analysis technique (i.e. 5ppb).

TABLE 5 (cont)

1978 SO<sub>2</sub> BUBBLER SUMMARY

units: ppb

CITY SITE LOCATION	SAROAD I.D.	DIST I.D.	NUMBER OF OBS.	ANNUAL ARITH. MEAN	GEOM STANDARD DEV.	MAXIMUM 24hr OBS	2nd MAXIMUM 24hr OBS
<u>MERRIMACK VALLEY AIR QUALITY CONTROL REGION (121)</u>							
HAVERHILL MUNICIPAL BUILDING	0840-001	MV-02	5	ID	1.79	19	18
LAWRENCE LAWRENCE GENERAL HOSPITAL	1000-003	MV-10	13	ID	2.59	38	32
LOWELL HIGH SCHOOL	1080-001	MV-04	2	ID	1.57	19	10
LOWELL FATHER NORTON MANOR	1080-003	MV-07	8	ID	2.13	29	28
LOWELL JOHN STREET MUNIC. GARAGE	1080-004	MV-09	13	ID	3.55	45	16
LOWELL ST. JOHN HOSPITAL	1080-005	MV-16	4	ID	1.93	28	16
<u>PIONEER VALLEY AIR QUALITY CONTROL REGION (042)</u>							
CHICOPEE CITY HALL	0400-001	PV-03	14	ID	2.35	29	25
CHICOPEE CHICOPEE STREET	0400-005	PV-14	13	ID	2.78	33	19
HOLYOKE BEAUDRY BONCHER APTS.	0860-006	PV-19	15	ID	2.32	32	27
SPRINGFIELD MILL STREET	2160-002	PV-02	15	ID	2.37	35	28
SPRINGFIELD TAYLOR STREET FIRE STATION	2160-003	PV-01	15	ID	2.40	34	31
SPRINGFIELD EAST COLUMBUS AVENUE	2160-005	PV-06	15	ID	2.82	38	30
<u>SOUTHEASTERN MASSACHUSETTS AIR QUALITY CONTROL REGION (120)</u>							
ATTLEBORO SOUTH MAIN ST. FIRE STATION	0120-002	SE-05	14	ID	3.54	24	23
FALL RIVER CENTRAL FIRE STATION	0580-001	SE-04	13	ID	3.88	43	33
FALL RIVER GLOBE STREET TRAILER	0580-002	SE-06	15	ID	1.66	BDL	BDL
NEW BEDFORD HIGH SCHOOL	1500-002	SE-03	10	ID	3.04	14	13
TAUNTON MORTON HOSPITAL	2240-001	SE-09	13	ID	3.11	26	10

ID - Insufficient data in two or more quarters prevents accurate calculation of annual arithmetic mean.  
 BDL - Below detectable limit of analysis technique (i.e. 5 ppb).

TABLE 6

## 1978 TSP SUMMARY

DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
MASSACHUSETTS AIR SURVEILLANCE NETWORKTOTAL SUSPENDED PARTICULATES (TSP) method: HI-VOL units:  $\mu\text{gm}/\text{M}^3$ 

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF OBSERVATIONS	ANNUAL GEOM MEAN	GEOMETRIC STD. DEV.	MAXIMUM 24hr OBSERVATION	2nd MAX 24hr OBSERVATION	# OF OBS ABOVE 260	# OF OBS ABOVE 150
SITE LOCATION									

BERKSHIRE AIR QUALITY CONTROL REGION (117)

PITTSFIELD	1800-004	BK-04	54	42	1.60	95	84	0	0
HIBBARD SCHOOL									
PITTSFIELD	1800-004	BK-03	43	43	1.67	117	104	0	0
DALTON AVE., STATE POLICE									

CENTRAL MASSACHUSETTS AIR QUALITY CONTROL REGION (118)

ATHOL	0100-001	CM-08	57	42	1.59	103	90	0	0
CITY HALL									
FITCHBURG	0620-004	CM-14	53	49	1.55	126	110	0	0
WATER STREET FIRE STATION									
FITCHBURG	0620-006	CM-16	55	47	1.63	123	107	0	0
GAS & ELECTRIC BUILDING									
WARREN	2372-001	CM-10	56	29	1.73	77	76	0	0
HIGH SCHOOL									
WORCESTER	2640-004	CM-02	253	55	1.57	180	173	0	3
NARCUS DEPARTMENT STORE									
WORCESTER	2640-008	CM-07	59	48	1.47	112	103	0	0
CLARK UNIVERSITY									
WORCESTER	2640-009	CM-01	57	40	1.66	125	99	0	0
PARKER BUILDING									
WORCESTER	2640-011	CM-05	59	40	1.56	111	88	0	0
QUINSIGAMOND COLLEGE									
WORCESTER	2640-011	CM-11	99	83	1.72	414	320	5	12
WASHINGTON & NEW SALEM STS									
WORCESTER	2640-013	CM-15	58	50	1.56	181	128	0	1
HEALTH DEPARTMENT									

(continued)

\* High day due to effect of street sweeper on the TSP filter  
 ID - Uneven distribution of samples within the year prevents accurate  
 determination of the annual geometric mean



TABLE 6 (cont)

## 1978 TSP SUMMARY

units:  $\mu\text{gm}/\text{M}^3$ 

CITY SITE LOCATION	SAROAD I.D.	DIST I.D.	NUMBER OF OBSERVATIONS	ANNUAL GEOM. MEAN	GEOMETRIC STD. DEV.	MAXIMUM 24hr OBSERVATION	2nd MAX 24hr OBSERVATION	# OF OBS. ABOVE 260	# OF OBS. ABOVE 150
<u>MERRIMACK VALLEY AIR QUALITY CONTROL REGION (121)</u>									
HAVERHILL MUNICIPAL BUILDING	0840-001	MV-02	45	45	1.62	128	104	0	0
LAWRENCE LAWRENCE GENERAL HOSPITAL	1000-003	MV-10	55	51	1.68	172	127	0	1
LOWELL HIGH SCHOOL	1080-001	MV-04	2	ID	1.20	89	69	0	0
LOWELL FATHER NORTON MANOR	1080-003	MV-07	8	ID	1.92	118	104	0	0
LOWELL ST. JOHNS HOSPITAL	1080-005	MV-16	47	47	1.55	120	115	0	0
<u>METROPOLITAN BOSTON AIR QUALITY CONTROL REGION (119)</u>									
BOSTON KENMORE SQUARE	0240-002	MB-01	52	82	1.64	247	176	0	3
BOSTON SOUTH BAY	0240-012	MB-04	45	67	1.40	129	119	0	0
BROCKTON PAINE SCH., CRESCENT ST.	0320-003	MB-SE	55	47	1.50	166	91	0	1
BROOKLINE HIGH SCHOOL	0340-001	MB-17	57	38	1.49	100	86	0	0
CAMBRIDGE HARVARD HERBARIUM	0360-001	MB-11	51	49	1.51	126	99	0	0
CAMBRIDGE SCIENCE PARK	0360-004	MB-05	37	72	1.66	237	121	0	1
CHELSEA FIRE HEADQUARTERS	0380-002	MB-32	51	64	1.51	160	131	0	1
FRAMINGHAM MIDDLESEX COUNTY COURT	0660-001	MB-14	49	47	1.43	108	87	0	0
LYNN CITY HALL	1100-001	MB-06	56	47	1.52	112	109	0	0
MEDFIELD STATE HOSPITAL	1210-001	MB-28	153	37	1.64	137	129	0	0

(continued)

ID - Uneven distribution of samples prevents accurate calculation of annual geometric mean

TABLE 6 (cont)

## 1978 TSP SUMMARY

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF OBSERVATIONS	ANNUAL GEOM. MEAN	GEOMETRIC STD. DEV.	MAXIMUM 24hr OBSERVATION	2nd MAX 24hr	# OF OBS. ABOVE 260	# OF OBS. ABOVE 150
SITE LOCATION									
METROPOLITAN BOSTON AIR QUALITY CONTROL REGION (119) (continued)									
MEDFORD	1220-002	MB-08	54	55	1.43	167	117	0	1
FIRE HEADQUARTERS									
MEDFORD	1220-003	MB-19	54	65	1.47	153	135	0	1
WELLINGTON CIRCLE									
NEEDHAM	1480-003	MB-33	53	43	1.42	109	92	0	0
GLOVER MEMORIAL HOSPITAL									
NORWOOD	1700-001	MB-18	57	43	1.48	87	75	0	0
NAHATAN ST. FIRE STATION									
QUINCY	1880-002	MB-21	48	67	1.40	145	130	0	0
FORE RIVER BRIDGE									
QUINCY	1880-007	MB-31	52	46	1.34	100	96	0	0
ATLANTIC FIRE STATION									
REVERE	1940-002	MB-10	49	49	1.43	108	98	0	0
GARFIELD JR HIGH SCHOOL									
WALTHAM	2340-004	MB-20	40	ID	1.92	217	184	0	3
MAIN AND MOODY STREETS									
WOBURN	2620-002	MB-09	51	44	1.46	121	95	0	0
MIDDLESEX COUNTY COURT									
PIONEER VALLEY AIR QUALITY CONTROL REGION (042)									
CHICOPEE	0400-001	PV-03	30	51	1.76	152	117	0	1
CITY HALL									
CHICOPEE	0400-005	PV-14	51	95	1.52	178	162	0	6
CHICOPEE STREET									
HOLYOKE	0860-006	PV-19	173	61	1.59	140	133	0	0
BEAUDRY BONCHER APTS									
NORTHFIELD	1652-001	PV-08	31	29	1.56	70	69	0	0
NORTHFIELD SCHOOL									
SPRINGFIELD	2160-002	PV-02	58	54	1.48	151	124	0	1
MILL STREET									
SPRINGFIELD	2160-003	PV-01	57	63	1.51	175	120	0	1
TAYLOR ST. FIRE STATION									
SPRINGFIELD	2160-011	PV-20	93	ID	1.55	203	165	0	3
HOWARD ST.									

(continued)

ID - Uneven distribution of samples prevents accurate calculation of annual geometric mean



TABLE 6 (cont)

## 1978 TSP SUMMARY

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF OBSERVATIONS	ANNUAL GEOM. MEAN	GEOMETRIC STD. DEV.	MAXIMUM 24hr OBSERVATION	2nd MAX 24hr OBSERVATION	# OF OBS. ABOVE 260	# OF OBS. ABOVE 150
SITE LOCATION									
SOUTHEASTERN MASSACHUSETTS AIR QUALITY CONTROL REGION (120)									
ATTLEBORO	0120-002	SE-05	58	47	1.45	95	84	0	0
SOUTH MAIN ST. FIRE STATION									
FALL RIVER	0580-001	SE-04	58	63	1.48	137	116	0	0
CENTRAL FIRE STATION									
NEW BEDFORD	1500-001	SE-03	53	41	1.48	141	76	0	0
HIGH SCHOOL									
TAUNTON	2240-001	SE-09	57	44	1.43	107	97	0	0
MORTON HOSPITAL									

ID - Uneven distribution of samples prevents accurate calculation of annual geometric mean

TABLE 7

1978 NO<sub>2</sub> BUBBLER SUMMARYDEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
MASSACHUSETTS AIR SURVEILLANCE NETWORKNITROGEN DIOXIDE (NO<sub>2</sub>) method: SODIUM ARSINITE units: PARTS PER BILLION (ppb)

CITY	SAROAD I.D.	DIST I.D.	NUMBER OF OBS.	ANNUAL ARITH. MEAN	GEOM STANDARD DEV.	MAXIMUM 24 hr OBS	2nd MAXIMUM 24 hr OBS
SITE LOCATION							
<u>BERKSHIRE AIR QUALITY CONTROL REGION (117)</u>							
PITTSFIELD	1800-004	BK-03	15	18	1.53	32	29
DALTON AVE., STATE POLICE							
<u>CENTRAL MASSACHUSETTS AIR QUALITY CONTROL REGION (118)</u>							
FITCHBURG	0620-003	CM-13	15	21	2.02	36	32
G & E SUBSTA., SUMMER ST.							
WORCESTER	2640-012	CM-11	14	39	1.53	76	59
WASHINGTON & NEW SALEM STS.							
<u>MERRIMACK VALLEY AIR QUALITY CONTROL REGION (121)</u>							
LOWELL	1080-004	MV-09	13	32	2.21	64	62
JOHN STREET MUNIC. GARAGE							
<u>METROPOLITAN BOSTON AIR QUALITY CONTROL REGION (119)</u>							
BOSTON	0240-002	MB-01	13	40	1.47	78	53
KENMORE SQUARE							
BOSTON	0240-016	MB-25	14	35	1.55	66	60
CALLAHAN TUNNEL							
CAMBRIDGE	0360-004	MB-05	14	24	1.66	36	42
SCIENCE PARK							
MEDFIELD	1210-001	MB-28	13	15	1.72	33	33
STATE HOSPITAL							
MEDFORD	1220-003	MB-19	13	35	1.85	74	51
WELLINGTON CIRCLE							
QUINCY	1880-002	MB-21	13	23	1.82	46	38
FORE RIVER BRIDGE							
WALTHAM	2340-004	MB-20	13	31	1.71	74	50
MAIN & MOODY STREETS							

(continued)

ID - UNEVEN DISTRIBUTION OF SAMPLES WITHIN THE YEAR PREVENTS ACCURATE  
CALCULATION OF ANNUAL ARITHMETIC MEAN

TABLE 7 (cont)

1978 NO<sub>2</sub> BUBBLER SUMMARY

units: (ppb)							
CITY SITE LOCATION	SAROAD I.D.	DIST I.D.	NUMBER OF OBS.	ANNUAL ARITH. MEAN	GEOM STANDARD DEV.	MAXIMUM 24 hr OBS	2nd MAXIMUM 24 hr OBS
<u>PIONEER VALLEY AIR QUALITY CONTROL REGION (042)</u>							
CHICOPEE CHICOPEE STREET	0400-005	PV-14	14	31	2.29	63	57
SPRINGFIELD EAST COLUMBUS AVENUE	2160-005	PV-06	15	42	1.60	74	68
<u>SOUTHEASTERN MASSACHUSETTS AIR QUALITY CONTROL REGION (120)</u>							
FALL RIVER GLOBE STREET TRAILER	0580-004	SE-06	15	13	1.27	20	17

